In the specification

Amend the specification as follows:

Page 2, lines 4-7:

In a preferred embodiment, the light scanning means form part of a confocal scanning microscope and the rotary stage ~~(corresponding to the rotary stage disclosed in the applicant's co-pending International Patent Application No. PCT/GB02/02373)~~ includes a stationary chamber within which the specimen is suspended.

Page 3, lines 11-27:

~~According to the present invention, samples for use in the present invention may be prepared employing conventional pathological and histological techniques and procedures well known to persons skilled in the art.~~

~~For example, in situ hybridisation (particularly useful for detecting RNAs):Hammond K L, Hanson I M, Brown A G, Lettice L A, Hill R E "Mammalian and Drosophila dachsund genes are related to the Ski proto-oncongene and are expressed in eye and limb". Mech Dev. 1998 Jun;74(1-2):121-31.~~

~~Immunohistochemistry (particularly useful for detecting proteins and other molecules): Sharpe J, Ahlgren U, Perry P, Hill B, Ross A, Hecksher-Sorensen J, Baldock R, Davidson D. "Optical projection tomography as a tool for 3D microscopy and gene expression studies" Science. 2002 Apr 19;296(5567):541-5.~~

~~It will be appreciated that modification may be made to the invention without departing from the scope of the invention.~~

Page 5, lines 8-14:

Light from the optics 3 passes through a specimen 6 which is rotated within, and supported by, a rotary stage 7 ~~which in structure corresponds to the rotary stage disclosed in the applicant's co-pending International Patent Application No. PCT/GB02/02373~~. The rotary stage 7 rotates the specimen to successive indexed positions at each of which one complete scan of the excitation light is undertaken whilst the specimen is stationary. After passing through the specimen 6, the light is processed by an optical system 8 which directs the light to a one-dimensional or two-dimensional array of high speed light detectors 9.

Page 7, lines 12-14:

In Figure 6d unscattered rays from any scanned position are directed onto the light detector [[6]] 9a. The arrows represent successive positions of the laser beam as it is scanned across the specimen 6 in a direction perpendicular to the optical axis.

Page 8, lines 5-16:

In the second case of Figure 7b, the illumination beam is slightly higher and therefore the interfaces it encounters between the grey region and the white region of the specimen (different refractive indexes) are slightly displaced from perpendicular. This causes two slight refractions of the main path such that when the light emerges from the specimen it is no longer parallel to the incident beam and is directed slightly to the side of the original central light detector 9a. If auxiliary light detectors 9b are positioned on either side of the central detector 9a, these can measure the degree of refraction. Any projection will give a certain distribution of intensities along the array of light detectors. The distribution of intensities can be used to determine the angle at which the main light path emerged from the specimen. ~~zIn~~ In the last case of Figure 7c, a different scanned

position has caused greater refraction of the beam, which is reflected in a further shift along the array of detectors.

Page 9, lines 4-7:

Figures 9 to 12 show three-dimensional views of the apparatus. In Figure 9, all un-refracted (and unscattered) rays through a two-dimensional section of the specimen are ~~focused~~ focussed onto the central light detector of the array. The specimen 6 is rotated about a vertical axis between indexed positions in each of which a complete scan is undertaken.

Page 10, after line 28 and before line 30, add:

Samples for use in the present invention may be prepared employing conventional pathological and histological techniques and procedures well known to persons skilled in the art.

For example, in-situ hybridisation (particularly useful for detecting RNAs):Hammond K L, Hanson I M, Brown A G, Lettice L A, Hill R E "Mammalian and Drosophila dachsund genes are related to the Ski proto-oncongene and are expressed in eye and limb". Mech Dev. 1998 Jun;74(1-2):121-31.

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